

## Abstract

The present invention provides a method of producing pluripotent stem cells, which comprises culturing testis cells  
5 using a medium containing glial cell derived neurotrophic factor (GDNF) or an equivalent thereto to obtain pluripotent stem cells. The medium can further contain leukemia inhibitory factor (LIF), epidermal growth factor (EGF), basic fibroblast growth factor (bFGF) and the like. Using the production method  
10 of the present invention, it is possible to produce pluripotent stem cells, which have conventionally been only obtainable from fertilized eggs, embryos and the like, from a postnatal individual. Using the pluripotent stem cells, it is possible to construct diverse tissues having histocompatibility for  
15 autotransplantation, and the pluripotent stem cells are useful in medical fields such as regeneration medicine and gene therapy. Also, the pluripotent stem cells are useful in the field of biotechnology because they can be used to prepare transgenic animals, knockout animals and the like.

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